


California Energy Commission
RENEWABLE ENERGY PROGRAM
Summary of Activities
October 1, 2008 – December 31, 2008

RENEWABLE ENERGY PROGRAM

 ***Increasing renewable energy as an essential part of reducing California's greenhouse gas emissions.***

ACCOMPLISHMENTS

Renewables Portfolio Standard Program

Under California's current Renewables Portfolio Standard (RPS) law, retail sellers are required to increase the renewable content of their electricity sales by at least 1 percent per year, with a goal of serving 20 percent of the state's retail electricity sales with renewables by 2010. In November 2008, Governor Schwarzenegger set into motion higher RPS goals by signing Executive Order S-14-08, which calls on California to raise its renewable energy aims to 33 percent by 2020 and expedite development of renewable energy sites. This more aggressive goal reinforces the importance of renewable energy as a component of the state's greenhouse gas reduction goals codified in Assembly Bill 32 (Núñez, Chapter 488, Statutes of 2006).

The Energy Commission and the CPUC jointly implement the RPS. The Energy Commission's initial roles were to certify renewable facilities as eligible for the RPS, design and implement an accounting system to track and verify RPS compliance, and distribute supplemental energy payments (SEPs) to cover the above-market costs of renewable energy procured to meet the RPS. In October 2007, the enactment of SB 1036 (Perata, Chapter 685, Statutes of 2007) repealed the provisions for awarding SEPs and required the Energy Commission to refund the remaining unencumbered SEP funds to the retail sellers, which occurred in March 2008. The legislation also transferred the administrative responsibility for above-market costs to the CPUC. The CPUC develops rules for and provides oversight of procurement activities.

Since the RPS policy was established in 2002, the state's investor-owned utilities (IOUs) — Pacific Gas & Electric, Southern California Edison, and San Diego Gas & Electric — have conducted a number of renewable energy solicitations. From these competitive solicitations (including an all-source solicitation), and also through bilateral negotiations, the IOUs have signed 106 contracts for 7,792 to 10,673 megawatts (MW) of new and existing renewable energy projects to date (range in capacity reflects build-out options). This includes 92 contracts representing 7,089 to 9,882 MW of new, repowered, or restarted renewable facilities. Of these, 32 contracts are with projects that are currently online for 969 MW of capacity (1,112 MW is the maximum capacity due to some of those projects being only partially online). Online facilities account for 14 percent of the total minimum contracted capacity for new, repowered, or restarted renewable facilities.

(Source: Database of Investor-Owned Utilities' Contracts for Renewable Generation, Contracts Signed towards Meeting the California RPS Targets; updated January 18, 2009, http://www.energy.ca.gov/portfolio/contracts_database.html).

Following are RPS activities for the quarter ending December 2008:

- The Energy Commission has certified or pre-certified 658 facilities as eligible for the RPS, representing 19,349 MW of renewable capacity. Of that generating capacity, 11,044 MW is proposed new capacity from 112 planned facilities that have been conditionally pre-certified; however not all are yet under contract. These numbers do not reflect activity in the application queue.
- The Energy Commission, through its technical assistance contractor, launched an effort to track the progress of the state's local publicly owned electric utilities (POUs) toward implementing the RPS. Such information is necessary to evaluate statewide progress. It is recognized that the state's RPS goals (20% by 2010) can only be realized with the full participation of the POUs, which serve 25 to 30 percent of electricity retail sales in California.

Energy Commission staff engaged in major outreach to seek input and assistance from the POUs, and compiled information for a new database from the POUs' formal filings to the Energy Commission, including Energy Commission-POU-RPS forms, annual reports for the Power Source Disclosure Program, and a variety of other publicly available sources. The database includes information on POUs' RPS policies, renewable energy deliveries, renewables solicitations, and new renewable energy contracts signed since 2002. A consultant report, published in December 2008, summarizes the POUs' RPS policies and their efforts in implementing these policies. The report and database, which will be periodically updated as needed, are available at the following address: www.energy.ca.gov/2008publications/CEC-300-2008-005/index.html.

RPS Contracts

The IOUs continued RPS contract activities this quarter as a result of their solicitations conducted in 2006, 2007, and 2008. Eight Advice Letters were submitted to the CPUC by the IOUs this quarter and eight contracts were executed as a result of the solicitations while others were negotiated bilaterally, separate from the RPS solicitation process. RPS contract activities are detailed in the table, *Renewable Portfolio Standard Contract Activity by Utility, October through December 2008*, located at www.energy.ca.gov/renewables/quarterly_updates/index.html.

Western Renewable Energy Generation Information System

The Energy Commission, in conjunction with the Western Governors' Association and renewable energy market stakeholders, designed an accounting system to verify that renewable energy output is counted only once for the purposes of California's Renewables Portfolio Standard and other regulatory or voluntary programs related to renewable energy throughout the west. With the subsequent addition of efforts by the Western Electricity Coordinating Council, these organizations implemented the Western Renewable Energy Generation Information System (WREGIS), a regional renewable energy certificate tracking and registry

system, which provides WREGIS Certificates to support verification of compliance with regulatory and voluntary renewable energy programs in the Western Interconnect.

- APX, Inc., the System Development & Technical Operations Contractor
 - APX continued to provide maintenance and support services for WREGIS and to make changes to the system that were requested by stakeholders and approved by the WREGIS Committee.
 - APX continued to work on the addition of verification of energy delivery functionality to WREGIS. This functionality change was in response to stakeholders from states (including California) with an RPS that includes delivery in their eligibility requirements. The delivery functionality is scheduled for user acceptance testing in January 2009 and release in WREGIS in February 2009.
- WREGIS Administration
 - 210 companies registered to be Account Holders in WREGIS by December 31, 2008.
 - 777 generators were registered in WREGIS by December 31, 2008.
- The WREGIS Committee held monthly conference calls to discuss and review policy issues related to WREGIS, such as minor changes to system functionality and program documents. The WREGIS Committee met October 15 – 16 at the Pacific Energy Center in San Francisco for its annual in-person meeting.
- The WREGIS Stakeholder Advisory Committee, Policy Subcommittee, Change Control Subcommittee, and Operations Subcommittee also met monthly or semi-monthly to discuss issues that may be brought to the WREGIS Committee for review and approval. These supporting committees and subcommittees provide a greater opportunity for stakeholder input and collaboration than the WREGIS Committee meetings.
- The Energy Commission adopted the *Joint Commission Report on Tracking System Operational Determination (Tracking System Report)* at its Business Meeting on December 3. The CPUC released the Resolution on an identical *Tracking System Report* on November 21. Senate Bill 107 (SB 107, Statutes of 2006) charged the CPUC with determining whether to allow the use of tradable Renewable Energy Credits (RECs) toward RPS compliance. SB 107 also stated that before tradable RECs could be authorized, the tracking system must be operational. The *Tracking System Report* was a joint effort of the CPUC and the Energy Commission that proposed criteria that must be met before the tracking system could be deemed “operational,” as well as determining that those criteria had been met.
- Following are WREGIS expenditures this quarter from the Consumer Education account (unless noted otherwise):
 - APX, Inc. contract for \$3,277,702 for the services of a System Development and Technical Operations (SD&TO) Contractor for WREGIS. The SD&TO Contractor modified an existing generation registry and tracking system to serve the needs of WREGIS and will continue to perform operations and maintenance for the system at least through the end of the Energy Commission/APX Contract in October 2010. Expended \$42,538

- Western Electricity Coordinating Council contract for \$2,202,750 for the administration of WREGIS. The WREGIS Administration staff runs the day-to-day operations of WREGIS. Expended \$100,770

New Renewable Facilities Program

The intent of the New Renewable Facilities Program (NRFP) was to foster the development of new in-state renewable electricity generation facilities by providing financial support to renewable projects that became operational after September 26, 1996. The program was comprised of two elements: the original program under SB 90, and the program as evolved under SB 1038, SB 1078, and SB 107, which offered SEPs to qualifying facilities to cover the above-market costs of meeting the RPS. In October 2007, the enactment of SB 1036, effective January 1, 2008, eliminated funding for this program with the exception of projects that were still operational as of January 1, 2007. In accordance with the legislation's direction, the Energy Commission implemented the following:

- The Energy Commission terminated all pending awards made to projects under the New Renewable Resources Account of the Renewable Resource Trust Fund (RRTF) prior to January 1, 2002, unless the projects were online and operational by January 1, 2007.
- The Energy Commission's authority to award SEPs was eliminated as of January 1, 2008. Beginning in 2008, the CPUC has authority over the disposition of SEPs for above-market costs.

As noted by the Senate Energy, Utilities and Communications Committee, SB 1036 eliminates the SEP program because the program was not achieving its purpose. As of January 1, 2008, no applications for SEPs had been approved.

- In March 2008, the Energy Commission refunded the New Renewable Resources Account's remaining unencumbered funds (totaling \$461,681,784) to the electrical corporations whose ratepayers contributed funds to support the RRTF. These electrical corporations included Pacific Gas & Electric, San Diego Gas & Electric, Southern California Edison, and Bear Valley Electric Service (a division of Golden State Water Company).
- The enactment of SB 1036 removed the New Renewable Resources Account from the RRTF effective July 1, 2008.

Under the NRFP's original SB 90 funding, production incentives (cents per kWh payments for generated renewable energy) for proposed projects were allocated to the lowest bidders during three competitive solicitation processes. Production incentives are paid over a five-year period once a project begins generating electricity. Although the New Renewable Resources Account was eliminated July 1, 2008, active NRFP projects will continue to be paid for generation from the RRTF and those projects' previously encumbered funding award dollars.

- During this quarter, approximately \$248,866 in production incentives was paid to 3 facilities for 20 gigawatt-hours of renewable generation.
- Approximately \$2.4 million is encumbered for participating auction winners.
- Of the eleven remaining active project accounts, ten reached the end of their funding term by the end of the 2008 calendar year. Upon payment of their final invoices, these project

accounts have been closed and all remaining funds will be disencumbered. The amount of unused funds from these projects is estimated to be \$3.8 million.

- During this quarter, the accounts for the following nine projects were closed and funds disencumbered:

CEC ID #	FAA#	Name
50004	REN-98-006	Buena Vista Landfill Gas Power Project
50060	REN-01-060	Colton Landfill
50061	REN-01-061	Mid-Valley
50062	REN-01-062	Milliken
50071	REN-01-071	Windridge, LLC
50074	REN-01-074	High Winds Phase 1, LLC
50078	REN-01-078	High Winds Phase 2 Wind Energy Power
50083	REN-01-083	Project 184
50084	REN-05-001	Wintec Energy #2-B

- One project reached the end of their funding term on December 31, 2008. Payment of their final invoice will occur next quarter.
- The last active project account will reach the end of their five-year payment period on December 30, 2009.
- Since the NRFP's inception in June 1998, forty-seven¹ projects were able to come online and generate electricity, representing 488 megawatts of new renewable energy capacity. The NRFP has paid a total of approximately \$75.9 million in production incentives to new renewable generating facilities for 8,671 gigawatt-hours of generation.

Emerging Renewables Program

Over the last decade the Emerging Renewables Program has provided \$404 million in rebates and production incentives to customers who have purchased and installed 28,430 renewable energy systems, representing 125 MW of capacity, to offset part or all of their electricity needs at their homes or businesses.

On December 31, 2006, the solar portion of the Emerging Renewables Program ended and was replaced on January 1, 2007, with the Energy Commission's New Solar Homes Partnership and the California Public Utilities Commission's California Solar Initiative. Fuel cells using

¹ The Wintec #2 wind project was split into two projects, but in order to maintain consistency with previous years, it will continue to be reported as one project.

renewable fuel and small wind turbines are still eligible for rebates under the Energy Commission's Emerging Renewables Program.

During this quarter, the Energy Commission paid \$555,000 to 38 rebate applicants for completed projects located in investor-owned utility service areas. These completed projects represent 252 kW of generating capacity from photovoltaic and wind systems. Customers planning to install additional systems held approved rebate reservations totaling 2.3 MW of solar and wind capacity, encumbering about \$6.8 million.

California Solar Initiative/New Solar Homes Partnership

The California Solar Initiative (CSI) is a \$3.35 billion solar incentive program with the goal of installing 3,000 MW of capacity by 2016. The CSI is administered by the CPUC, Energy Commission, and publicly-owned utilities. The CPUC's portion of the CSI provides incentives to existing and new nonresidential customers and to existing residential customers. The Energy Commission's New Solar Homes Partnership (NSHP) offers incentives to encourage solar installations, with high levels of energy efficiency, in the residential new construction market for investor-owned electric utility service areas. Publicly-owned utilities administer solar incentive programs for their individual service areas.

The goal of the NSHP is to install 400 MW of capacity by 2016. Unlike the ERP, incentives under the NSHP are not capacity-based. Instead, the actual incentive for a particular system and installation, which is paid up-front, is dependent on an Expected Performance-Based Incentive calculation of the system's performance compared to a reference system. Since April to June of 2008, program administration has been subsumed under the investor-owned utilities, with oversight from the Energy Commission. With coordinated IOU administration of both the NSHP and Residential New Construction incentive programs, greater administrative efficiencies are being achieved, ultimately simplifying the application process for builders and retailers.

NSHP Program Activity

- NSHP activity for the October to December 2008 quarter included the following:
 - A total of 107 reservation requests for 1,827 solar systems were received.
 - Incentives totaling \$1.5 million were paid for 0.57 MW of solar capacity with an additional \$9.9 million encumbered for approved applications, representing 1.28 MW.
- Since the program began in January 2007, a total of 375 applications for 6,481 solar systems have been received through December 31, 2008. With support from the NSHP, 484 residential solar systems have been installed. This represents 1.15 MW of renewable electricity capacity and brings total disbursements to nearly \$3.2 million. A total of \$28.6 million is currently encumbered for customers planning to install additional systems.
- The on-line application web tool continues to be refined, allowing greater ease of use, and also providing more information on program statistics.

Expenditures for the NSHP support contracts are reported under their funding source, the Consumer Education Program.

Pilot Performance-Based Incentive Program

This pilot program began in January 2005 as a possible long-term option for building the PV market in California. With a budget of \$10 million, the program offered a rebate level of \$0.50 per kWh based on the energy production of the installed solar PV system. The initial reservation period was one year to install the system with quarterly performance payments made over a three-year period. The Pilot Performance-Based Incentive Program received a total of 51 applications and closed December 31, 2006 with commencement of the California Solar Initiative.

- During this quarter, \$195,000 in payments was made.
- A total of 19 systems, representing 890 kW of capacity, are installed and receiving quarterly payments.

Existing Renewable Facilities Program

The Existing Renewable Facilities Program (ERFP) offers production incentives to biomass, solar thermal electric, and wind facilities. Incentive payments are tied to market prices, with no payments made if the market price is above a predetermined target price. Beginning 2007, under Senate Bill 1250's program structure, individual facilities must apply for funding. Funding eligibility decisions will be made on a facility-by-facility basis.

The Energy Commission adopted the Fifth Edition of the *Existing Renewable Facilities Program Guidebook* at its September 24, 2008, Business Meeting. The revised *Guidebook* streamlined the application process and made funding decisions more transparent to stakeholders. Additionally, the revised *Guidebook* incorporated changes from the enactment of SB 1036, which changed the ERFP's RRTF funding allocation from 10 percent to 20 percent of the dollars collected for the Renewable Energy Program effective January 1, 2008.

With approval of the revised *Guidebook*, staff processed and began making payments to eligible facilities during this quarter for 2008 generation. Staff expects to further revise the *Guidebook* during the third quarter of the 2008-2009 fiscal year to reflect recent statutory changes to the program. Specifically, Governor Schwarzenegger signed AB 3048 (Committee on Utilities and Commerce, Chapter 558, Statutes of 2008) on September 28, 2008, which removes restrictions on biomass fuels that could be utilized by biomass facilities participating in the ERFP. Accordingly, the proposed *Guidebook* changes would remove these restrictions and would also reduce reporting requirements related to the repeal of the fuel restrictions. Other proposed changes would clarify the incentive structure offered to facilities receiving "all-in" pricing; clarify the provisions for distributing incentive payments to facilities receiving time-of-use payments; and would make other conforming changes including removing references to the Competition Transition Charge and to the New Renewable Resources Account, which no longer exist.

- To date, cumulative payments totaling \$279 million have been made to existing facilities for generation.
- ERFP rollover funds from 2007—those remaining after payments have been made and rolled over to the next payment cycle as available funds—total \$16.1 million.

- 544 renewable energy facilities are certified as RPS eligible renewable suppliers, with 140 eligible for funding from the ERFP.

Consumer Education Program

This program is designed to increase public awareness of renewable energy and its benefits, and to help build a consumer market for renewable energy and small-scale emerging renewable technologies.

New Solar Homes Partnership

Contract support activities:

- ProProse contract for \$105,000 assists the NSHP campaign by securing varying levels of partnerships. These include builders' participation in the program, financial institutions offering energy efficiency and solar-friendly loans or programs, realtors and appraisers, utilities, and other entities to help leverage the NSHP's outreach and public awareness campaign dollars. The Department of General Services approved an amendment of an additional \$145,000 on May 20, 2008 for a combined total of \$250,000 to continue efforts of partnership development for purposes of leveraging dollars for the NSHP Public Awareness Campaign. This amendment extends the term of the contract through the end of 2009 to coordinate with the Edelman contract noted below.

Contractor activities this quarter included the following:

- Researched and contacted potential partners for the 2008 and 2009 campaigns, including:
 - Discussions and planning with Stewart Title for Builder Outreach.
 - Calls and e-mails with Solio (solar cellular phone chargers) to obtain logo artwork for sweepstakes.
 - Contacted Advanced Solar about status of campaign and upcoming events.
 - Continued partnership development with the California Association of Realtors.
 - Made arrangement for meeting with D.R. Horton (potential NSHP builder) along with SunPower.
 - Contacting the California Building Industry (CBIA) and reviewing their materials for potential partnership opportunities.
 - Contacted the California Municipal Utilities Association about possibly presenting information about the NSHP.
 - Coordinated with Edelman a plan to discuss the NSHP with KB Homes following up on a meeting at the greenXchange conference.
 - Conversations with Kyocera (solar manufacturer) about potential partnership participation.
 - Conversations with California Department of Consumer Affairs regarding Rebuild San Diego outreach project participation.
 - Meeting with representatives from seminar sponsored by Build It Green.

- E-mails with Mortgagegreen regarding green mortgages.
- Continued negotiation with SMUD as a potential NSHP partner and participation in Solar Energy Awareness Month.
- Conversations with SunPower to request permission to use elements of the 2008 Go Solar California sweepstakes for an educational video.
- Coordinated with Edelman and Clear Channel on the NSHP Woodside grand opening event in Temecula and developed radio advertising copy.
- Planned and coordinated with Edelman and Clear Channel on the launch of Solar Energy Awareness Month events.
- Wrote Santa Monica Solar Energy Awareness Month event description for Los Angeles Department of Water and Power, and followed up with phone call to invite them to participate.
- Researched and wrote opt-in language for sweepstakes registration page.
- Conference call and planned for meeting with CPUC, including writing joint Marketing and Outreach Plan recommendations for the Go Solar California campaign and to discuss partnering strategies.
- Reviewed Edelman's revised marketing and outreach plan.
- Compiled names and contact information for prospective partners to include in the master partnership database.

Expended \$ 25,415

- Edelman's three-year contract for \$4.3 million provides an array of marketing and media planning services. These include market research to analyze and identify California home buyers who are most likely to seek higher levels of energy efficiency and solar photovoltaic systems when purchasing new homes; determining the most effective messaging, logo design, and branding; creative development (advertisements and print collateral); and ad placement.

Contractor activities this quarter included the following:

- Developed and prepared presentation of Solar Energy Awareness Month plan for the NSHP Advisory Committee meeting.
- Researched and updated enrolled NSHP builder community locations and contacts for Solar Energy Awareness Month outreach.
- Drafted recommendations for the Governor's participation in Solar Energy Awareness Month events and locations.
- Drafted "Top 10" solar tips for the Go Solar California website.
- Coordinated Solar Energy Awareness Month event activities with Pacific Gas and Electric, Southern California Edison, San Diego Gas & Electric, the North State Building Industry Association, and the Building Industry Association of Southern California to discuss partnering on Solar Energy Awareness Month events.

- Wrote tags for Solar Energy Awareness Month radio spots.
- Coordinated and reviewed edits to sweepstakes creative materials with Barcellona (an Edelman subcontractor) and the Energy Commission including website, web banners, radio ads, and kiosk design.
- Animated the sweepstakes internet banner ads.
- Finalized design and coordinated production of the cover/wrap for the kiosks to be used to promote the Go Solar California sweepstakes.
- Drafted solar video script and accompanying questions; coordinated development and approval of solar education video for the Go Solar California sweepstakes website.
- Worked on revised copy for Go Solar California sweepstakes radio spots.
- Wrote copy for and designed a consumer sweepstakes broadcast email; coordinated and submitted an insertion order to email push provider XactMail.
- Revised the approved 2008 Marketing and Media Plan to reflect changes to sweepstakes execution.
- Participated in planning calls and coordinated builder marketing benefit logistics for the Woodside Homes Temecula Community event on July 19 with Woodside Homes, SunPower, Woodside Homes' PR agency of record, Clear Channel, and the Energy Commission.
- Secured builder trade media for Woodside Homes and NSHP in TechHome Builder and Green Builder.
- Secured interview for Woodside Homes and NSHP with *Press-Enterprise*.
- Attended planning calls with OCR Solar & Roofing and Pinn Brothers to discuss builder marketing support available for solar community opening in Brentwood, California on September 25.
- Coordinated NSHP media content for Pinn Brothers Palmilla event and reviewed draft media materials.
- Outlined Pinn Brothers Palmilla event radio advertisement needs, drafted and finalized script, and coordinated placement with Clear Channel.
- Rochelle Barcellona participated in a conference call with Edelman and Clear Channel regarding the weekend walk-throughs and support of the Pinn Brothers builder event and assisted in coordination of the walk-throughs.
- Drafted and submitted abstract for West Coast Green conference panel.
- Coordinated identifying and securing panelists for West Coast Green conference panel.
- Confirmed panelists for West Coast Green and coordinated a meeting to discuss presentation content.
- Attended call with West Coast Green panelists to discuss presentation.
- Began drafting presentation deck for West Coast Green; sent deck to panelists for input.

- Coordinated with Pacific Gas and Electric and Cal Expo to determine partnership opportunities for the California State Fair, including Go Solar California kiosks and NSHP banner.
- Researched San Diego Solar Week participation opportunities and coordinated logistics for participation.
- Discussed PCBC (Pacific Coast Builders Conference) abstract and keynote speaker opportunities; submitted PCBC panel proposal for 2009.
- Registered and coordinated for the SMUD/North State Building Industry Association Green Living Healthy Homes event.
- Corresponded with SunCraft regarding panel discussion at the Building Industry Show and coordinated logistics for panel participation in Building Industry Show.
- Contacted Southern California Edison regarding sharing booth space at the Building Industry Show and coordinated details.
- Designed ads for the Builder Industry Show conference program.
- Reviewed and sent Building Industry Show ads to the Energy Commission for review; coordinated ad placement and submitted ad.
- Corresponded with the Energy Commission and Clear Channel regarding the Emerging Technology Conference logistics.
- Finalized and submitted guest column bylined by the Chairman to Green Home Builder for August 2008 issue.
- Communicated blogger engagement process to the Energy Commission and conducted regular online conversation monitoring.
- Conducted media outreach to long- and short-lead consumer and trade publications focusing on solar tips and regional solar communities.
- Researched and discussed opportunities for YouTube and Flickr accounts and uploaded photographs to Flickr.
- Submitted approved op-ed to *Fresno Bee* and followed up on status.
- Updated NSHP media coverage tracker.
- Met with California Building Industry Association regarding current industry media outreach and forecasting building industry issues.
- Discussed NSHP marketing support and media outreach opportunities with Lennar (an NSHP Builder).
- Reviewed list of NSHP communities and researched Southern California builders.
- Researched activities, associated costs, and logistics for 2009 Marketing and Media Plan.
- Began drafting the 2009 Marketing and Media Plan.
- Coordinated updates to the Master Partnership Database with Barcellona and ProProse; incorporated updates and distributed database to the team.

- Received final copy of the California Sun Certified service mark registration.
- Created and worked on designs for the builder Advertising toolkit.
- Researched and updated list of NSHP community locations for consumer brochure insert piece; coordinated layout and edits with Barcellona.
- Reviewed consumer and builder brochure copy and coordinated edits with Barcellona.
- Designed and made revisions to an NSHP FAQ template.
- Barcellona began developing and made final edits to the logo standards for the Go Solar California logo.
- Gathered radio details for 2008 media recap report.
- Reviewed the Google adwords campaign – its effectiveness and delivery estimates.
- Reviewed and finalized pre-advertising survey summary report.
- Continued researching NSHP and the process of incorporating solar into new affordable developments.
- Planned for and participated in the NSHP outreach working group calls.
- Began drafting NSHP Nonprofit Developer Outreach Kit.
- Completed and submitted research findings and proposed content for the development of the municipal/local government tool kit.
- Completed research on existing and proposed ordinances and other local incentives for the purpose of creating a model ordinance.
- Identified targets for local government outreach and potential program partners.

Expended \$503,235.58

KEMA Contract

Technical assistance contract provides support for Consumer Education activities as follows:

- California Utility Allowance Model work: Contractor is in the final stages of developing a quantitative model to be made available to California's affordable housing community to estimate project-specific utility expenses for affordable housing developments. The model is capable of estimating utility expenses for projects with and without solar systems. Expenditures reported in this report include review of new tax credit regulations as well as recent changes to the IRS rules which affects the utility allowance tool and revisions to the tool that incorporated approved changes requested by the stakeholders.

Expended \$5,648

New Technical Support Contract

A second contract with KEMA, Incorporated, was executed on July 11, 2008 for a three-year term, ending April 30, 2011, for a total of \$3,681,000. Under this contract, KEMA will provide technical assistance to the Renewable Energy Program, including Consumer Education related activities.

Currently, there is no work being conducted in support of Consumer Education; consequently, there are no expenditures to report for this quarter.

Other

The Energy Commission was a sponsor for the annual Solar Power International 2008 Conference hosted by the Solar Electric Power Association (SEPA) held in San Diego October 13-16.

Expended \$4,995

ADDITIONAL RENEWABLE ENERGY PROGRAM ACTIVITIES

Cost Benefit Study of Self-Generation Incentive Program

Under Assembly Bill 2778 (Lieber, Chapter 617, Statutes of 2006), on or before November 1, 2008, the Energy Commission, in consultation with the CPUC and California Air Resources Board, must evaluate the costs and benefits, including air pollution, efficiency, and transmission and distribution system improvements, of providing ratepayer subsidies for renewable and fossil fuel “ultraclean and low-emission distributed generation” as part of the CPUC’s Self-Generation Incentive Program (SGIP). The Energy Commission’s evaluation must be conducted as part of its *Integrated Energy Policy Report (IEPR)*. The Energy Commission must include recommendations for changes in the eligibility of technologies and fuels under the Self-Generation Incentive Program, and whether the level of subsidy should be adjusted after considering its conclusions on costs and benefits.

A contract with TIAX, Inc. was approved by the Energy Commission to provide the comprehensive cost-benefit analysis of electric generation technologies related to the CPUC’s SGIP. The findings and recommendations from the consultant’s final report are included in the *2008 IEPR Update*, which was adopted by the Energy Commission in November 2008. The report is available on the Energy Commission’s website at www.energy.ca.gov/2008publications/CEC-300-2008-010/CEC-300-2008-010-F.PDF. Following is a brief summary of the report’s recommendations:

- Program eligibility should be based on overall efficiency and performance of systems, regardless of fuel type.
- The CPUC should consider reinstituting formerly eligible engine and turbine technologies that operate on nonrenewable and renewable fuels.
- The CPUC should require IOUs to procure distributed generation or combined heat and power in areas that provide locational benefits to the system.

Expended \$300,407

Guidelines for California’s Solar Electric Incentive Programs

Senate Bill 1 (Murray, Chapter 132, Statutes of 2006) requires the Energy Commission, in consultation with the CPUC, local publicly-owned electric utilities, and interested members of the public, to establish eligibility criteria for solar energy systems;

conditions for incentives; and rating standards for equipment, components, and systems for electric ratepayer-funded solar energy incentive programs in California by January 1, 2008.

The bill identifies the following conditions for receiving ratepayer-funded incentives:

- High quality solar energy systems with maximum system performance to promote the highest energy production per ratepayer dollar.
- Optimal system performance during periods of peak demand.
- Appropriate energy efficiency improvements in the new and existing home or commercial structure where the solar energy system is installed.

In September, staff issued a draft document proposing the following changes to the current *Guidelines*: address other solar electric generating technologies and specify eligibility requirements, update the energy efficiency requirements by defining the Tier levels for the new construction buildings to reflect the adopted 2008 Title 24 (Part 6) Building Energy Efficiency Standards, address the concerns of the CPUC's California Solar Initiative program administrators and publicly owned utilities, and make other non-substantive changes. A Committee workshop was held on September 29, 2008 to present the draft *Guidelines*' proposed changes and to solicit public comment from interested parties. After further review, the *Guidelines for California's Solar Electric Incentive Programs Pursuant to Senate Bill 1, 2nd Edition* were adopted at the Energy Commission's December 3, 2008 business meeting. The current guidelines can be found on the Energy Commission's website at:

<http://www.energy.ca.gov/2008publications/CEC-300-2008-007/CEC-300-2008-007-CMF.PDF>

Other SB 1 requirements to be completed by the Energy Commission include:

- Initiate a public proceeding to study and make findings on whether, and under what conditions, solar energy systems should be required on new residential and new nonresidential buildings, including the establishment of numerical targets. The study is to be updated periodically.
- Develop an offset program that allows a developer or seller of production homes² to forego the offer requirement³ on a project by installing solar energy systems

² "Production home" means a single-family residence constructed as part of a development of at least 50 homes per project that is intended or offered for sale.

³ SB 1 requires a seller of production homes to offer a solar energy system option to all customers that enter into negotiations to purchase a new production home constructed on land for which an application for a tentative subdivision map has been deemed complete on or after January 1, 2011, and disclose (1) the total installed cost of the solar energy system option and (2) the estimated cost savings associated with the solar energy system option.

generating specified amounts of electricity on other projects, including, but not limited to, low-income housing, multifamily, commercial, industrial, and institutional developments. The amount of electricity required to be generated from solar energy systems used as an offset must be equal to the amount of electricity generated by solar energy systems installed on a similarly sized project within that climate zone, assuming 20 percent of the prospective buyers would have installed solar energy systems.

- Publish educational materials designed to demonstrate how builders may incorporate solar energy systems during construction as well as energy-efficiency measures that best complement solar energy systems.
- Develop and publish the estimated annual electrical generation and savings for solar energy systems. The estimates must vary by climate zone, type of system, size, lifecycle costs, electricity prices, and other factors the Energy Commission determines to be relevant to a consumer when making a purchasing decision.
- Provide assistance to builders and contractors, which could include technical workshops, training, educational materials, and related research.
- Conduct annual random audits of solar energy systems to evaluate their operational performance. A work authorization with KEMA (technical support contractor) to assist staff on developing a scoping study for a statewide audit plan is currently in progress and slated for completion in January of 2009.
- Evaluate the costs and benefits of having an increased number of operational solar energy systems as part of the electrical system with respect to their impact on the distribution, transmission, and supply of electricity, using the best available load profiling and distribution operations data from the CPUC, local POUs, and electrical corporations, and performance audits of installed solar energy systems.